

### **ABSTRACT OF THE DISCLOSURE**

This invention pertains to a method of modifying polymeric coating materials by adding organosulfur compounds, so that the metallic substrates coated with the modified polymeric materials become more resistant to corrosion. The organosulfur compounds are alkane thiols with a general formula  $R(CH_2)_nSH$ , where R represents H,  $NH_2$ ,  $HOOC$ , and  $HO$  groups and n is in the range of 10 to 21. The reagents are designed to increase the adhesion between the polymeric coating materials and the metallic substrates, which may be conducive to increased corrosion resistance.